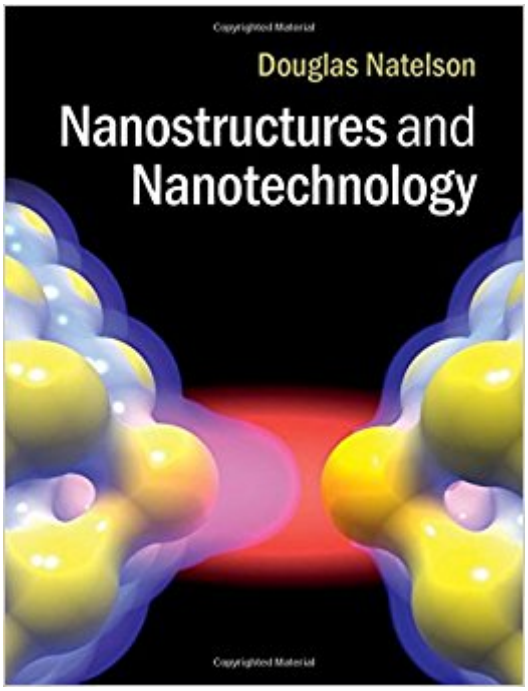
Ebook Directory
the best source of ebook

The book was found

Nanostructures And Nanotechnology



PDF
Adobe
DOWNLOAD EBOOK

Synopsis

Focusing on the fundamental principles of nanoscience and nanotechnology, this carefully developed textbook will equip students with a deep understanding of the nanoscale. Ã¢â ¬Â¢ Each new topic is introduced with a concise summary of the relevant physical principles, emphasising universal commonalities between seemingly disparate areas, and encouraging students to develop an intuitive understanding of this diverse area of study Ã¢â ¬Â¢ Accessible introductions to condensed matter physics and materials systems provide students from a broad range of scientific disciplines with all the necessary background Ã¢â ¬Â¢ Theoretical concepts are linked to real-world applications, allowing students to connect theory and practice Ã¢â ¬Â¢ Chapters are packed with problems to help students develop and retain their understanding, as well as engaging colour illustrations, and are accompanied by suggestions for additional reading. Containing enough material for a one- or two-semester course, this is an excellent resource for senior undergraduate and graduate students with backgrounds in physics, chemistry, materials science and electrical engineering.

Book Information

Hardcover: 639 pages
Publisher: Cambridge University Press; 1 edition (August 3, 2015)
Language: English
ISBN-10: 0521877008
ISBN-13: 978-0521877008
Product Dimensions: 7.4 x 1.3 x 9.7 inches
Shipping Weight: 3.2 pounds (View shipping rates and policies)
Average Customer Review: 5.0 out of 5 stars 3 customer reviews
Best Sellers Rank: #412,789 in Books (See Top 100 in Books) #56 inÃ Â Books > Science & Math > Technology > Nanotechnology #63 inÃ Â Books > Science & Math > Physics > Nanostructures #129 inÃ Â Books > Science & Math > Physics > Solid-State Physics

Customer Reviews

"Fundamentals of nanotechnology and its applications are well discussed in this book. I strongly recommend this book to all undergraduate and postgraduate students interested in nanotechnology." K. Kamala Bharathi, MRS Bulletin

Focusing on unchanging fundamental principles, this carefully developed textbook equips students

with a deep understanding of the nanoscale. Packed with end-of-chapter problems and colour illustrations, this is an ideal resource for senior undergraduate and graduate students with backgrounds in physics, chemistry, materials science and electrical engineering.

A good book for studying nanotechnology.

I taught from this book to junior and senior undergraduates over one semester. Of the four books I considered, I found this book to be the best coverage of *contemporary* physics topics and written in a style that physics majors would appreciate. There is a huge amount of information, so it is important to select the subtopics appropriately for the level of the class, but I found that I could design the type of course I really wanted to teach from this book without the need to supplement it with much other material. Example of some special topics in that section of my class: molecular electronics (AFM-controlled break junctions); magnetism (spintronics); photonics (electromagnetic cloaks); nanomechanics (coupled NEMS device and superconducting qubit) - plus tons of stuff in nanofluidics and biology that I didn't even get to. Where else could you get that breadth of information in a single source?

This is an outstanding intro to nanotechnology. It's aimed at something like a first-year graduate student in physics, so some background is assumed, but there are brief refreshers on useful solid-state concepts. The writing style is clear and concise, helping the reader to develop intuition with respect to what happens as surface effects start to compete with the behavior of a bulk material. The depth of coverage is appropriate for a survey course on nano, and there are plenty of pointers to further reading for anyone who is interested in diving into a particular subject. All in all, this is a well-written book, and I'm sure I will find myself referring to it when I need a reminder about how something works.

Download to continue reading...

Nanostructures and Nanomaterials: Synthesis, Properties, and Applications (2nd Edition) (World Scientific Series in Nanoscience and Nanotechnology) Nanostructures and Nanotechnology Ultraviolet nanoimprint lithography: Fabrication of ordered nanostructures, integrated optics and electronic devices Graphene-based Materials in Health and Environment: New Paradigms (Carbon Nanostructures) Quantum Mechanics for Nanostructures Nanostructures & Nanomaterials: Synthesis, Properties & Applications Nanoimprint Lithography: Principles, Processes and Materials (Nanotechnology Science and Technology) Cancer Nanotechnology: Principles and Applications in

Radiation Oncology (Imaging in Medical Diagnosis and Therapy) 3D Bioprinting and Nanotechnology in Tissue Engineering and Regenerative Medicine Nanotechnology: Understanding Small Systems, Third Edition (Mechanical and Aerospace Engineering Series) Nanophysics and Nanotechnology: An Introduction to Modern Concepts in Nanoscience (No Longer Used) Introduction to Nanoelectronics: Science, Nanotechnology, Engineering, and Applications Quantum Nanoelectronics: An introduction to electronic nanotechnology and quantum computing Scanning Microscopy for Nanotechnology: Techniques and Applications Nanotechnology in Endodontics: Current and Potential Clinical Applications The Social Life of Nanotechnology (Routledge Studies in Science, Technology and Society) Nanotechnology Risk Encyclopedia: Medical, Environmental, Ethical, Legal, and Societal Implications of Nanomaterials Introduction to Nanoscience and Nanotechnology Plasma Engineering: Applications from Aerospace to Bio and Nanotechnology Nanotechnology: Understanding Small Systems, Second Edition (Mechanical and Aerospace Engineering Series)

Contact Us

DMCA

Privacy

FAQ & Help